

United States Government

Department of Energy
Bonneville Power Administration

memorandum

DATE: March 19,2004

REPLY TO
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-194)

to: Jim Jellison
Natural Resource Specialist – TFO/Olympia

Proposed Action: Vegetation Management on the Paul Allston 230 kV & 500 kV
Transmission Line Corridor. Reference line: Longview – Chehalis #3 (Structures 1/1 –33/5)

Location: The project area is located in Lewis and Cowlitz Counties, WA in BPA's Olympia
Region.

Proposed by: Bonneville Power Administration.

Description of the Proposed Action: BPA proposes to remove tall growing and noxious
vegetation from the right of way and access roads that can potentially interfere with the
operation, maintenance, and reliability of the transmission lines located within the Paul Allston
right of way corridor.

Analysis: A checklist was completed for this project in accordance with the requirements
identified in the Bonneville Power Administrations Transmission System Vegetation
Management Program FEIS (DOE/EIS-0285). The checklist evaluated the following areas:

- *Description of right-of-way and vegetation management needed*
- *Vegetation to be controlled*
- *Surrounding land use and landowner*
- *Natural Resource*
- *Vegetation control methods*
- *Debris disposal.*
- *Monitoring*
- *Appropriate environmental documentation*

Finding: This Supplement Analysis finds that: (1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD; and (2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Greg Tippetts
Greg Tippetts
Environmental Scientist

CONCUR: /s/ Robert Beraud for
Thomas C. McKinney
NEPA Compliance Officer

DATE: 3/26/2004

Attachment

cc:

L. Croff – KEC-4
T. McKinney – KEC-4
J. Meyer – KEP-4
J. Sharpe – KEPR-4
G. Tippetts – KEPR/Olympia
P. Key – LC-7
J. Hilliard Creecy – T-DITT2
K. Rodd – TF/DOB-1
D. Krauss – TFO/Olympia
T. Grover – TFOF/Olympia
S. Martin – TFO/Olympia
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)

Vegetation Management Checklist Paul-Allston Corridor

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

See Handbook — [List of Right-of-way Components](#) for checkboxes and the requirements for the components [Rights-of-way](#), [Access Roads](#), [Switch Platforms](#), [Danger Trees](#), and [Microwave Beam paths](#)

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Longview-Chehalis#3 Reference line, Paul- Allston#2, Longview- Chehalis#1 and Napavine-Allston#1 ADNO's 8130, 8144, 8142,8128	42 mi., 2-500, 2-230,	525, variable R/W widths	34 mi. starting at str. 1/1 to str 33/5

Right Of Way:

Right-of-Way – clearing in right-of-way

A combination of mulching the easement because of the Scotch broom and the cut, lop and scatter of tall growing species will be utilized to treat hazardous vegetation and this will be followed up with a herbicide treatment.

Transmission Structures – clearing around

All structures will be cut and chemically treated to 30 feet from the center of the pole or from the legs of each steel tower.

Access Road clearing - approximate miles – 0.0 miles

All access roads will be either C, L&S, mulched or chipped due to the encroachment of Scotch broom, blackberries, low and tall growing brush and trees then either stump or foliar chemical treatment will be applied.

1.2 Describe the vegetation needing management.

See handbook — [List of Vegetation Types](#), [Density](#), [Noxious Weeds](#) for checkboxes and requirements.

Vegetation Types:

Douglas fir
True Fir
Hemlock
Alder
Maple
Willows
Cottonwood
Wild Cherry
Noxious Weeds - Scotch Broom
Blackberries
Cascara
Wild Filbert

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — for requirements and checkboxes.

Cut stump or follow-up herbicide treatments on sprouting-types species will be carried out to ensure that the roots are killed. Vegetation that will grow tall will be selectively eliminated before it reaches a height or density to begin competing with low-growing species.

1.4 Describe overall management scheme/schedule.

See Handbook - [Overall Management Scheme/Schedule](#).

Initial entry – All tall growing vegetation will be cut and chemically treat the stumps to prevent grow-in trees. Access, right-of-way roads and structure sites are to be cut and treated.

Subsequent entries – A follow-up chemical treatment is scheduled to begin in the late spring or early summer of 2004.

Future cycles – Every 4 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — [Landowners/Managers/Uses](#) for requirements, and [List of Landowners/Managers/Uses](#) for a checkbox list.

Landowners/Managers/Uses:

- Rural Residential Property
- Longview Fiber
- Wyehauser Timber Company
- Washington State DNR

Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — [Methods for Notification and Requesting Information](#) for requirements.

Olympia Region will send letters to the property owners about 2-4 weeks prior to cutting the brush. Door to door contact will be made where it is warranted.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — [Requirements and Guidance for Various Landowners/Uses](#) for requirements and guidance, also [Residential/Commercial](#), [Agricultural](#), [Tribal Reservations](#), [FS-managed lands](#), [BLM –managed lands](#), [Other federal lands](#), [State/ Local Lands](#).

Span		Landowner/use	Specific measures to be applied
From	To		
3/1+250	1020	No name	Xmas trees, no agreement
3/2+0	200	No name	Xmas tree, no agreement

6/1+600	909	Private Owner	T&B Agreement LU#91158
6/2 + 0	350	Private Owner	T&B Agreement LU#91158
19/4 + 400	1035	No name	Xmas trees, no agreement
21/4 + 200	23/2 + 825	Private Owner	Xmas tree, LU#81111
22/5 + 500 Under N-P#1	23/1 + 500	Private Owner	Xmas trees, LU#980437
26/2 + 800	1750	Private Owner	Xmas tree agree. LU#59812
26/3 + 0	360	Private Owner	Xmas tree agree. LU#59812
28/2 + 0 from 300 to	800 525' from Lt edge.	No name	Xmas trees, no agreement
28/3 + 0 from 300 to	575 525' from Lt edge.	No name	Xmas trees, no agreement
30/3 + 1900 Under	2100 P-A#1 line	Private Owner	Xmas trees, LU#84092
30/4 + 0 Between	400 L-C#3 & P- A#2	Private Owner	Xmas trees, LU#84092
31/3 + 1800	32/2 + 700	Private Owner	T&B Agreement, LU#980467

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — [Landowner Agreements](#) for requirements.

I need to work with the property owners who do not have an approved Xmas tree agreement and request that they submit an application for a formal agreement.

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

See handbook — [Casual Informal Use of Right-of-way](#) for requirements.

N/A

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — [Other Potentially Affected Publics](#) for requirements and suggestions.

I have contacted Richard Bellon, Cultural Resource Specialist of the Chehalis Tribe and Mike Iyall, Cultural Resource Specialist for the Cowlitz tribe regarding their knowledge of any cultural sites on the Longview-Chehalis#3 easement. They are not aware of any cultural sites.

3. IDENTIFY NATURAL RESOURCES

See Handbook — [Natural Resources](#)

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — [Water Resources](#) for requirements for working near water resources including buffer zones.

Span		Waterbody	T&E/ EFH	Method	Herbicide	Application Technique	Buffer	Other
From	To							
1/2+0	805	Wetlands	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
1/3+0	775	Wetlands	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
1/4 +0	775	Wetlands	No	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
1/5 +0	1230	Wetlands	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
1/5 + 1000	1150	Ditch#1	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
2/2 +715	785	No name creek	No	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
2/6 +0	75	No name creek	No	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
2/7 + 35	105	Ditch#8	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
3/3+150	300	Slough	No	Skip				
3/4+550	1100	Slough	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
3/5+550	750	Slough	No	Skip				
4/1+100	550	Slough	No	Skip				
4/1+775	950	Ditch	No	Skip				
5/6+835	975	No name creek	No	Skip				
6/2 + 0 Under	75 L-C#3	No name creek	No	Skip				

6/2 + 1165	1235	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
6/3+ 315	405	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
7/2+615	750	No name creek -int	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
7/3 + 1150	1300	No name creek	No	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
82+1200	1300	No name creek, int	No	Skip				
8/3 + 1215	1305	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
8/3 + 1500 L-C#3 only	2200	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
9/3+450	1050	Delameter Creek	T&E/ EFH	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
9/4 + 500	575	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
10/2 +900	1200	Monahan creek	T&E/ EFH	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer.	Waters Edge	Selective Cutting
10/2 + 1200 Diagonal	1849 Across R/W	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
10/3 +0 Diagonal	600 R/W	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
10/4 + 0 Parallel	1150 L-C#3	No name creek	No	C,L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
11/1+0	200	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
11/3+865	935	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
11/3 + 1300 Parallel	2300 under L-C#1	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
11/3 +850	1300	Wetland	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting

12/5 +1000	1325	Arkansas Creek	T&E/ EFH	Skip				
13/1 +485 Diagonal	555 R/W Xing	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
13/2+ 400	470	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
13/2+ 665	735	No name creek	No	Cut Stump	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
14/3 + 335	405	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
14/4+ 1070 Diagonal	1270 R/W Xing	Baxter Creek	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
15/2 + 415	505	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
15/2 + 1115	1185	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
15/2 + 1400	1600	Baxter Creek	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
15/3 +615	705	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
15/3 +1365	1435	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
16/1 + 965	1035	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
16/5 + 815	885	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
17/1 + 765	835	No name creek	Skip					
17/4 +265	335	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
18/1 + 565	635	Agren Creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
19/1 + 500 Parallel	1058 P-A#2	Stillwater Creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting

19/2 + Diagonal	300 R/W	Stillwater Creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
19/2 + 900 C-1#1	1100 Line only	Pond & No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
19/4 + 200 Parallel	400 P-A#2	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
19/4 + 0 Diagonal	750 R/W	No name creek	No	Skip				
19/5 + 800	1000	Stillwater Creek	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
20/2 + 350	700	Wetlands	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
20/5 + 300	370	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
20/5 + 370 Parallel	1600 L-C#3	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
20/5 + 1250 Under	1350 P-A#2	Pond	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
21/1 + 0 Parallel	500 L-C#3	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
21/3 + 415	485	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
21/4 + 865	935	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
22/1 + 300 Diagonal	1000 R/W	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
22/3 + 665	735	Duffy Creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
23/1 + 610	680	Snow Creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
24/3 + 0 35' from	300 Lt edge	Pond	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
24/4 + 0 35' from	100 Lt edge	Pond	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting

24/6 + 865	935	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
24/6 + 1090	1160	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
25/1 + 550	620	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
26/1 + 500 Parallel	1100 P-A#2	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
26/2 + 0 Parallel between	600 L-C#3 & P-A#2	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
26/2 + 600	670	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
26/3 + 800 Under	1700 L-C#3	Wetland	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
26/4 + 670 Diagonal	1000 R/W	King Creek	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
28/3 + 265	335	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
29/1 +800	1000	No name creek	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
29/4 + 750	820	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
30/3 + 1265	1335	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
31/2 + 865	935	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
31/3 + 1200 Diagonal	1400 across R/W	Stearns	EFH	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting
32/3 + 225	305	No name creek	No	C, L&S	Garlon 3A/ or Arsenal	Spot Treat w/in buffer	Waters Edge	Selective Cutting

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — [Herbicide Use Near Irrigation, Wells or Springs](#) for buffers and herbicide restrictions.

Span		Well/irrigation/ or spring	Herbicide	Buffer	Other notes/measures
From	To				
5/6 +1200	1460	Spring	No herbicide	164' Radius	Between P-A#2 & N-P#1 linwa
6/1 + 640	960	Well	No Herbicide	164' Radius	Rt edge-L-C#3
9/5 + 0	310	Spring	No herbicide	164' Radius	Between L-C#3 & N-P#1 lines
9/5 + 565	885	Spring	No herbicide	164' Radius	Between L-C#3 & N-P#1 lines
11/1 + 40	360	Spring	No herbicide	164' Radius	Under L-C#3
11/3 + 760	1060	Spring	No herbicide	164' Radius	Under N-P#1#1
11/3 + 1960	2260	Spring	No herbicide	164' Radius	Under L-C#3 line
24/1 + 760	1060	Spring	No herbicide	164' Radius	Under P-A#2 line

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — [T&E Plant or Animal Species](#) for requirements and determining presence.

Span		T&E Species	Method/mitigation or avoidance measures
From	To		
9/3+ 450 Diagonal	1050 R/W Xing	Summer/Winter Steelhead, Lower Columbia ESU Delameter Creek	Selective cutting of trees only in riparian zone and/or cutting trees tops that are within 50' of the conductor at max sag. Shrubs will not be cut that are less than 10' height where the ground to conductor clearance is less than 50' at max sag. Herbicide treatments within 100' of waters edge with only practically non - toxic (to Aquatic species) chemicals (Garlon 3A / Tahoe 3A or Arsenal). Top trees when shrubs are not present to provide shade and a silt buffer.
10/4 + 900 Diagonal	1200 R/W Xing	Summer/Winter Steelhead Lower Columbia ESU Monahan Creek,	Same treatment as noted in 9/3+450 to 1050.
12/5+ 1000 Diagonal	1325 R/W Xing	Summer/Winter Steelhead Lower Columbia ESU Arkansas creek,	Same treatment as noted in 9/3+450 to 1050.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

See Handbook — [Protecting Other Species](#) for requirements.

Span		Species	Measures
From	To		
14/4 + 1070	1270	Anadromous Salmon Essential Fish Habitat	Selective cutting of trees only in riparian zone and/or cutting trees tops that are within 50' of the conductor at max sag. Shrubs will not be cut that are less than 10' height where the ground to conductor clearance is less than 50' at max sag. Herbicide treatments within 100' of waters edge with only practically non - toxic (to Aquatic species) chemicals (Garlon 3A / Tahoe 3A or Arsenal). Top trees when shrubs are not present to provide shade and a silt buffer.
15/2 + 1400	1600	Anadromous Salmon Essential Fish Habitat	Same treatment as noted in 14/4+1070 to 1270.
19/2 + 800	1000	Anadromous Salmon Essential Fish Habitat	Same treatment as noted in 14/4+1070 to 1270.
26/4 +670	1000	Anadromous Salmon Essential Fish Habitat	Same treatment as noted in 14/4+1070 to 1270.
29/1 +800	1000	Anadromous Salmon Essential Fish Habitat	Same treatment as noted in 14/4+1070 to 1270.
31/3 +1200	1400	Anadromous Salmon Essential Fish Habitat	Same treatment as noted in 14/4+1070 to 1270.

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — [Visual Sensitive Areas](#) for requirements.

N/A

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – [Cultural Resources](#) for requirements.

Span		Describe sensitivity	Method/mitigation measures
From	To		
1/1	33/5	Cultural Sites	The Chehalis and Cowlitz Tribes do not know of any cultural sites on this transmission corridor. If a site is discovered during the course of vegetation control, work will be stopped in the vicinity and the local tribe(s) will be contacted as well as the BPA Environmental Specialist.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

See Handbook – [Steep/Unstable Slopes](#) for requirements.

N/A

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – [Spanned Canyons](#) for requirements.

Span		Methods, cutting
From	To	
10/2+900	1200	Ground to conductor clearance is greater than 125', selective cutting of conifer trees when the tops of the trees are within 50' of the conductor at max sag.
12/5 + 1000	1325	Skip draw.
17/1 +500	1000	Skip draw.
19/1 + 500 Under	1058 P-A#2	Selectively cut conifer trees when the tops of the trees are within 50' of the conductor at max sag.
19/2 + 0	600	Selectively cut conifer trees when the tops of the trees are within 50' of the conductor at max sag.

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — [Methods](#)

4.1 List Methods that will be used in areas not previously addressed in steps above.

See Handbook — [Manual](#), [Mechanical](#), [Biological](#), and [Herbicides](#) for requirements for each of the methods.

Span		Methods, including herbicide active ingredient, trade name, application technique
To	From	
1/1	33/5	<p>25% Garlon 4/Tahoe 4E and 75% Forest Crop Oil (FCO) for cut stump/basal treatment in non-sensitive areas (spans & outside a 100' buffer from any steam, ponds, or wetlands).</p> <p>50/50 % mixture of Arsenal or Garlon 3A/Tahoe 3A and water for stump treatment or basal treatment in sensitive areas (spans & inside a 100' buffer from any steam, ponds, or wetlands) up to the waters edge.</p> <p>Any Initial or follow up basal/localized treatment with Garlon 3A/Tahoe 3A and Escort or Arsenal and Escort on sprouting stumps and/or brush. A 35' buffer will be maintained from any steam, ponds, wetlands, or sensitive areas.</p> <p>Initially, foliar treat Scotch broom as well as a follow up treatment in the spring-summer.</p> <p>Basal treat is essential for treatment of Big Leaf Maple, Cottonwood and Wild Cherries sprouts rather than foliar treatment in order to deliver enough herbicide product to the roots to cause mortality of the target trees.</p>

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — [Debris disposal](#) for a checkbox list and requirements.

Debris Disposal:

Chip (Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site. Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.)

Lop and Scatter (Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.)

Mulch (Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.)

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — [Reseeding/replanting](#) for requirements.

N/A

Native grasses and vegetation are present on the entire right-of-way that will seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and Black Berries are present.

5.3 If not using native seed/plants, describe why.

N/A

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

Monitoring of the success of the brush-cutting program will begin the spring in which evaluation of soil erosion as a result of the brush-cutting program will be made. If grass seeding is necessary, native grass seed will be applied.

6. DETERMINE MONITORING NEEDS

See handbook — [Monitoring](#) for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Monitoring of the effectiveness of the herbicide treatment will begin in the spring and follow up treatment of cut stump/basal or foliar treatment of target vegetation. The mixture of the product is 25% Garlon 4/Tahoe 4E and 75% FCO for stump treatment or 97% water, 3% Garlon 3Atahoe 3A with 2 oz/ac. of Escort or Arsenal for foliar treatment. Depo-RTU will be utilized to reduce drift when necessary.

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — [Prepare Appropriate Environmental Documentation](#) for requirements. . Also prepare Supplement Analysis — [Supplement Analysis](#) — for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.

All proposed brush cutting and chemical treatment activities on this corridor is noted in the EIS.

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

No